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SEQUENCE LISTING

<110> REN, DEJIAN
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GARBERS, DAVID L.
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<120> SPERM-SPECIFIC CATION CHANNEL, CATSPER2, AND USES
THEREFOR

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<140> 10/828,975

<141> 2004-04-21

<150> PCT/US02/33676

<151> 2002-10-22

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<170> PatentIn Ver. 3.3

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 35 40 45
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 50 55 60
 Val Arg Phe Ser Ile Lys Pro Gln Arg Ile Glu Gln Ile Ser His Ala
 65 70 75 80
 Gln Arg Leu Leu Ser Arg Leu His Val Arg Cys Ser Gln Arg Pro Pro
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 Leu Ser Leu Trp Ala Gly Trp Val Leu Glu Cys Pro Leu Phe Lys Asn
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 115 120 125
 Ile Glu Leu Leu Glu Ser Thr Asn Thr Lys Leu Trp Pro Leu Lys Leu
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 210 215 220
 Arg Gln Ile Gln Ile Ile Ile Leu Val Leu Val Arg Ala Leu Lys Ser
 225 230 235 240
 Met Thr Phe Leu Leu Met Leu Leu Leu Ile Phe Phe Tyr Ile Phe Ala
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 Thr Val Phe Ile Leu Phe Thr Leu Asp His Trp Tyr Ala Leu Leu Gln
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 355 360 365
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 370 375 380
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 405 410 415
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 435 440 445
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 450 455 460
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 485 490 495
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Asp Pro Ser Arg Gln Lys Lys Leu Val Leu Gly Asp Gln His Gln Leu
          50          55          60
Val Arg Phe Ser Ile Lys Pro Gln Arg Ile Glu Gln Ile Ser His Ala
          65          70          75          80
Gln Arg Leu Leu Ser Arg Leu His Val Arg Cys Ser Gln Arg Pro Pro
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Leu Ser Leu Trp Ala Gly Trp Val Leu Glu Cys Pro Leu Phe Lys Asn
          100          105          110
Phe Ile Ile Phe Leu Val Phe Leu Asn Thr Ile Ile Leu Met Val Glu
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Ile Leu Leu Lys Trp Leu Ser Asn Phe Ser Val Phe Trp Lys Ser Ala
          165          170          175
Trp Asn Val Phe Asp Phe Val Val Thr Met Leu Ser Leu Leu Pro Glu
          180          185          190
Val Val Val Leu Val Gly Val Thr Gly Gln Ser Val Trp Leu Gln Leu
          195          200          205
Leu Arg Ile Cys Arg Val Leu Arg Ser Leu Lys Leu Leu Ala Gln Phe
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Arg Gln Ile Gln Ile Ile Ile Leu Val Leu Val Arg Ala Leu Lys Ser
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 Asp Val Trp Lys Val Pro Glu Val Ser Arg Ile Phe Ser Ser Ile Tyr
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 Phe Ile Leu Trp Leu Leu Leu Gly Ser Ile Ile Phe Arg Ser Ile Ile
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 340 345 350
 Glu Glu Met Ala Arg Arg Glu Val Gln Leu Lys Ala Asp Met Phe Lys
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35 40 45
Ala Tyr Gln Gln Lys Leu Met Ser Gly Asp Gln Glu Gln Leu Val Arg
50 55 60
Phe Ser Ile Lys Pro Arg Arg Met Gly His Ile Thr His Ser Arg Arg
65 70 75 80
Leu Leu Ser Arg Leu Arg Val Arg Cys Ser Arg Met Pro Pro Leu Ser
85 90 95
Leu Trp Ala Gly Trp Val Leu Asp Ser Ser Val Phe Ser Lys Phe Ile
100 105 110
Ile Ser Leu Ile Phe Leu Asn Thr Phe Val Leu Met Val Glu Ile Glu
115 120 125
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130 135 140
Glu Val Ala Asp Trp Phe Ile Leu Leu Ser Phe Ile Val Glu Ile Leu
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165 170 175
Val Phe Asp Phe Phe Val Thr Leu Leu Ser Leu Leu Pro Glu Leu Val
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195 200 205
Val Cys Arg Val Leu Arg Ser Leu Lys Leu Phe Ala Arg Phe Arg Gln
210 215 220
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Phe Leu Leu Met Leu Leu Leu Ile Phe Phe Tyr Ile Phe Ala Val Thr
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 325 330 335
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 340 345 350
 Met Ser His Leu Glu Val Gln Tyr Lys Ala Asp Met Phe Lys Gln Gln
 355 360 365
 Ile Ile Gln Arg Arg Gln His Ser Glu Ser Leu Arg Gly Thr Ser Leu
 370 375 380
 Gly Lys Val Ser Glu Asp Ile Ile Glu Thr Ser Asp Ala Ser Asp Asp
 385 390 395 400
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 405 410 415
 Asp Lys Ser Asp Ala Thr Glu Ser Asp Gly Glu Glu Ser Asp Ser Glu
 420 425 430
 Asn Ser Glu Ser Glu Asn Ser Glu Ser Glu Lys Ile Asp Pro Glu Lys
 435 440 445
 Asp Tyr Ala Lys Lys Ser Tyr Pro Glu Lys Ser His Pro Glu Lys Ser
 450 455 460
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 465 470 475 480
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 485 490 495
 Glu Ser Lys Glu Lys Ala Tyr Pro Val Ser His Ser Ile Ser Ser His
 500 505 510
 Gly Ser Ile Ala Ala Asp Thr Ala Phe Leu Glu Asn Leu Asp Trp Glu
 515 520 525
 Thr Leu Val His Glu Asn Leu Pro Gly Leu Met Asp Met Asp Gln Asp
 530 535 540
 Asp Arg Ile Val Trp Pro Arg Asp Ser Leu Phe Arg Tyr Phe Glu Leu
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<212> PRT

<213> Mus musculus

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      35           40           45
Phe Leu Ser Ile Tyr Val Leu Glu Ala Val Leu Lys Leu Ile Ala Leu
      50           55           60
Gly Leu Glu Tyr Phe Tyr Asp Pro Trp Asn Asn Leu Asp Phe Phe Ile
 65           70           75           80
Met Val Met Ala Val Leu Asp Phe Val Leu Leu Gln Ile Asn Ser Leu
          85           90           95
Ser Tyr Ser Phe Tyr Asn His Ser Leu Phe Arg Ile Leu Lys Val Phe
      100          105          110
Lys Ser Met Arg Ala Leu Arg Ala Ile Arg Val Leu Arg Arg Leu Ser
      115          120          125
Ile Leu Thr Ser Leu His Glu Val Ala Gly Thr Leu Ser Gly Ser Leu
      130          135          140
Pro Ser Ile Thr Ala Ile Leu Thr Leu Met Phe Thr Cys Leu Phe Leu
      145          150          155          160
Phe Ser Val Val Leu Arg Ala Leu Phe Gln Asp Ser Asp Pro Lys Arg
          165          170          175
Phe Gln Asn Ile Phe Thr Thr Leu Phe Thr Leu Phe Thr Met Leu Thr
          180          185          190
Leu Asp Asp Trp Ser Leu Ile Tyr Ile Asp Asn Arg Ala Gln Gly Ala
      195          200          205
Trp Tyr Ile Ile Pro Ile Leu Met Ile Tyr Ile Val Ile Gln Tyr Phe
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Ile Phe Leu Asn Leu Val Ile Ala Val Leu Val
      225          230          235

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